

WHAT IS CLAIMED IS:

1. An interface apparatus comprising:

a USB interface portion which makes communication with an external first device via a USB cable;

5 a parallel interface portion which makes communication with an external second device via a parallel cable; and

a control portion which, after a processing command signal has been received from the first device  
10 via the USB interface, when a signal state of the parallel interface portion is detected, and then, it is determined that the second device connected to the parallel interface portion enters a power saving mode, generates a switch signal for switching the current  
15 power saving mode to a normal mode to supply the switch signal to the second device via the parallel interface portion; and after it has been detected that the second device has been switched into the normal mode, controls the processing command signal so as to be supplied to  
20 the second device via the parallel interface portion.

2. An interface apparatus according to claim 1, wherein the processing command signal is a print command signal with image information, and the second device is a printer unit.

25 3. An interface apparatus according to claim 2, wherein the control portion having received the print command signal with the image information stores the

image information in a storage region; reads out the  
image information from the storage region after it has  
been detected that the second device has been switched  
to a normal mode; and controls the read-out image  
5 information together with the processing command signal  
so as to be supplied to the second device via the  
parallel interface portion.

4. An interface apparatus comprising:

a USB interface portion which makes communication  
10 with an external first device via a USB cable;

a parallel interface portion which makes  
communication with an external second device via  
a parallel cable; and

a control portion which, when a command for  
15 notifying a status of the parallel interface portion is  
issued from the first device via the USB interface  
portion, returns the status to the USB interface  
portion in response to the command; when a switch  
command for switching a power saving mode of the second  
20 device to a normal mode is issued from the first device  
via the USB interface portion, generates a switch  
signal for switching the current power saving mode to  
the normal mode in response to the switch command; when  
it is detected that the second device is switched to  
25 the normal mode, returns the fact to the first device  
via the USB interface portion; and further, if a print  
command is issued from the first device via the USB

interface portion, controls the print command so as to be supplied to the second device via the parallel interface portion.

5           5. An interface apparatus according to claim 4, wherein a status command of the parallel interface portion via the USB interface portion is GET\_PORT\_STATUS.

10           6. An interface apparatus according to claim 4, wherein a switch command for switching the power saving mode from the USB interface portion to a normal mode is SOFT\_RESET.

15           7. An interface apparatus according to claim 4, wherein a switch signal to be generated to switch the power saving mode to the normal mode is a pulse to be supplied to an nInit line of the parallel interface portion.

..... 8. An image forming apparatus comprising: .....

20           an image forming portion having a power saving mode and a normal mode, the image forming portion forming an image according to image information on a recording medium; and

          an interface portion having:

25           a parallel interface portion which is connected to the image forming portion via a parallel cable;

          a USB interface portion which makes communication with an external device via a USB

cable; and

5 a control portion which, upon receipt of  
an indication signal from the external device, when  
a signal state of the parallel interface portion is  
detected, and then, it is determined that the image  
forming portion connected to the parallel interface  
portion enters a power saving mode, generates a switch  
signal for switching to a normal mode to be supplied to  
the image forming portion via the parallel interface  
10 portion, and which, after it has been detected by the  
switch signal that the image forming portion has been  
switched to the normal mode, the processing command,  
controls the processing command signal so as to be  
supplied to the image forming portion via the parallel  
15 interface portion.

9. An image forming apparatus according to  
claim 8, wherein the control portion having received  
the print command signal and the image information from  
the external device switches the image forming portion  
20 from the power saving mode to the normal mode in  
response to the receipt.

10. An image forming apparatus according to  
claim 8, wherein, when a command for notifying a status  
of the parallel interface portion is issued from the  
external device via the USB interface portion, the  
25 control portion returns the status to the external  
device via the USB interface portion in response to

the command; when a switch command for switching  
a power saving mode of the image forming portion to  
a normal mode is further issued from the external  
device via the USB interface portion, the control  
5 portion generates a switch signal for switching to the  
normal mode in response to the switch command to be  
supplied to the image forming portion via the parallel  
interface portion; when it is detected that the image  
forming portion has been switched to the normal mode,  
10 the control portion returns the fact to the external  
device via the USB interface portion; and when a print  
command is further issued from the external device via  
the USB interface, the control portion controls the  
print command so as to be supplied to the image forming  
15 portion via the parallel interface portion.